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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,675	11/09/2001	Yugo Watanabe	9683/96	2435

7590 07/25/2005

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EXAMINER	
LY, NGHI H	

ART UNIT	PAPER NUMBER
2686	

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/045,675	WATANABE, YUGO	
	Examiner	Art Unit	
	Nghi H. Ly	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7-10,13,14,16 and 20* is/are rejected.

7)☒ Claim(s) *5,6,11,12,15 and 17-19* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4, 7-10, 13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima (US 6,272,344) in view of Jones (US 6,363,323).

Regarding claim 1, Kojima teaches a location registration apparatus (see Title and Abstract) comprising: a presence area storage unit for storing a presence area information indicating a presence area of a portable communication terminal (see column 7, lines 65-68), and a control unit for (the system of Kojima inherently includes a control unit), when the portable communication terminal is moving with the moving object (see column 2, lines 19-22), changing the presence area information of the portable communication terminal stored in the presence area storage unit based on the information stored in the storage unit (see column 6, lines 12-15, column 7, lines 41-67, and column 8, lines 26-36, also see column 4, lines 13-29).

Kojima does not specifically disclose a traveling schedule storage unit for storing a scheduled path information indicating a scheduled path of a moving object and a scheduled time information indicating a scheduled time of the movement of the moving object.

Jones teaches a traveling schedule storage unit for storing a scheduled path information indicating a scheduled path of a moving object (see column 6, lines 35-37) and a scheduled time information indicating a scheduled time of the movement of the moving object (see Abstract and column 3, lines 6-32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Jones into the system of Kojima in order to overcome many inadequacies and deficiencies of the prior art (see Jones, column 2, lines 65-67).

Regarding claim 2, Kojima further teaches the control unit receives, from a moving object communication apparatus installed in the moving object, an identification information of a portable communication terminal moving with the moving object, and specifies the portable communication terminal moving with the moving object based on the identification information (see column 2, lines 23-34 and column 4, lines 13-30).

Regarding claim 3, Kojima teaches the control unit specifies the pass area within which the portable communication terminal is to be located based on location information (see column 2, lines 19-22), and changes the presence area information of the portable communication terminal to the one corresponding to the specified pass area (see column 6, lines 12-15, and column 7, lines 41-67, also see column 4, lines 13-29)

Kojima does not specifically disclose the scheduled path information indicates one or more pass areas through which the moving object passes, and the scheduled time information indicates the time for which the moving object is located in each of the

pass areas, and wherein, while the portable communication terminal is moving with the moving object, the control unit specifies the pass area within which the portable communication terminal is to be located based on the current time, the scheduled path information, and the scheduled time information, and changes the presence area information of the portable communication terminal to the one corresponding to the specified pass area.

Jones teaches the scheduled path information indicates one or more pass areas through which the moving object passes, and the scheduled time information indicates the time for which the moving object is located in each of the pass areas (se Abstract), and wherein, while the portable communication terminal is moving with the moving object (see column 8, lines 52-59), the control unit specifies the pass area within which the portable communication terminal is to be located based on the current time, the scheduled path information, and the scheduled time information, and changes the presence area information of the portable communication terminal to the one corresponding to the specified pass area (see Abstract and column 3, lines 6-32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Jones into the system of Kojima in order to overcome many inadequacies and deficiencies of the prior art (see Jones, column 2, lines 65-67).

Regarding claim 4, Kojima further teaches the pass area is a base station area each formed by a base station (see column 1, lines 11-17).

Regarding claim 7, claim 7 is rejected with the same reason as set forth in claim 1 above.

Regarding claim 8, claim 8 is rejected with the same reason as set forth in claim 2 above.

Regarding claim 9, claim 9 is rejected with the same reason as set forth in claim 3 above.

Regarding claim 10, claim 10 is rejected with the same reason as set forth in claim 4 above.

Regarding claim 13, claim 13 is rejected with the same reason as set forth in claim 6 above.

Regarding claim 20, claim 20 is rejected with the same reason as set forth in claim 1 above.

3. Claims 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlsson et al (US 5,970,408) in view of Jones (US 6,363,323) and further in view of Kojima (US 6,272,344).

Regarding claim 14, Carlsson teaches a mobile communication network (see fig.1) comprising: a plurality of base stations each of which forms a base station area (see fig.1, base stations 12 and 14 and see fig.3, area 12A, 12B, 12C and 14A), a presence area storage unit for storing a presence area information indicating a presence area of a portable communication terminal (see fig.9, VLR 312 and see column 16, lines 20-25), changes the presence area information of the portable

communication terminal stored in the presence area storage unit (column 16, lines 20-25, see "location update"), retrieves the presence area information of the portable communication terminal from the presence area storage unit when an incoming call request to the portable communication terminal is received (see column 16, line 65 to column 17, line 9), and transmits the incoming call request to the base station in the presence area indicated by the retrieved presence area information (see column 16, line 65 to column 17, line 9).

Carlsson does not specifically disclose a traveling schedule storage unit for storing a scheduled path information indicating one or more base station areas through which a moving object accompanied by one or more said portable communication terminals passes, and a scheduled time information indicating a scheduled time of the movement of the moving object.

Jones teaches a traveling schedule storage unit for storing a scheduled path information indicating one or more base station areas through which a moving object accompanied by one or more said portable communication terminals passes (see column 8, lines 52-66), and a scheduled time information indicating a scheduled time of the movement of the moving object (see Abstract, column 3, lines 6-32 and column 6, lines 35-37), a control station which (the teaching of Jones inherently teaches a control station), when the portable communication terminal is moving with the moving object (see column 8, lines 52-66) specifies a present area information indicating a base station area (see column 16, lines 1-13) within which the moving object is predicted to be located based on the current time, the scheduled path information, and the

scheduled time information stored in the traveling schedule storage unit (see Abstract, column 3, lines 6-32 and column 6, lines 35-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Jones into the system of Carlsson in order to overcome many inadequacies and deficiencies of the prior art (see Jones, column 2, lines 65-67).

The combination of Carlsson and Jones does not specifically disclose changing the presence area information of the portable communication terminal stored in the presence area storage unit based on the specified presence area information.

Kojima teaches changing the presence area information of the portable communication terminal stored in the presence area storage unit based on the specified presence area information (see column 6, lines 12-15, column 7, lines 41-67, and column 8, lines 26-36, also see column 4, lines 13-29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the above teaching of Kojima into the system of Carlsson and Jones in order to provide a position registration method for a mobile communications system which can achieve reduction of the number of times of position registration of a mobile station (see Kojima, column 1, lines 63-66).

Regarding claim 16, claim 16 is rejected with the same reason as set forth in claim 14 above.

Allowable Subject Matter

4. Claims 5, 6, 11, 12, 15 and 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 5, 11, 15 and 17, the combination of Kojima and Jones teaches the claimed limitation of claims 1, 7, 13 and 20. The combination of Kojima, Carlsson and Jones fails to teach the traveling schedule storage unit stores an auxiliary path information indicating a more extensive area than the pass area indicated by the scheduled path information, and wherein, when the moving object is not moving on schedule, the control unit changes the presence area information on the portable communication terminal moving with the moving object to a presence area information according to the location of the moving object based on the auxiliary path information and the scheduled time information.

Regarding claim 18, the combination of Kojima, Carlsson and Jones teaches the claimed limitation of claims 14 and 16. The combination of Kojima, Carlsson and Jones fails to teach the base station comprises a storage unit for storing a scheduled presence time information indicating the time for which the moving object is to be within a base station area of the base station, and a base station control unit for judging if the moving object is moving on schedule based on the scheduled presence time information, and sending, when judged that the moving object is not moving on schedule, a notice of abnormal running indicating that to the control station, and wherein the control station recognizes, by receiving the notice of abnormal running from the base station, that the

moving object does not move on schedule.

Response to Arguments

5. Applicant's arguments with respect to claims 1-4, 7-10, 13, 14, 16 and 20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571) 272-7911. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi H. Ly
07/13/05

CHARLES APPIAH
PRIMARY EXAMINER